#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Group Art Unit: !

To be Assigned

ANDREW C. HIATT and FLOYD ROSE

Examiner:

To be Assigned

Serial No. 08/300,484

Filed: September 1, 1994

For: ENZYME CATALYZED TEMPLATE-INDEPENDENT CREATION OF PHOSPHODIESTER BONDS USING PROTECTED NUCLEOTIDES

STATEMENT UNDER 37 C.F.R. § 1.821 (F)

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821 (e), (f) and (g), or § 1.825 (d) and (b) respectively, are the same.

Respectfully submitted,

LYON & LYON

By: Jeff Stu

Registration No. 34 613

First Interstate World Center 633 West Fifth Street Suite 4700 Los Angeles, CA 90071 (213) 489-1600

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231

Kim Avnold-Cabe

\_ C4 Cabeller

Signature of Person Mailing Paper

Febr. 6, 1995

Date of Deposit



	: CRF Error's Corrected by the STIC Systems Branch  CRF Processing Date: 3/30/95
Serial N	Jumber: O 8 / SO S ( ) Edited by:
	Changed a file from non-ASCII to ASCII  Verified by:   Verified by:   (STIC staff
	Changed the margins in cases where the sequence text was "wrapped" down to the next line
	Edited a format error in the Current Application Data section, specifically:
	Edited the Current Application Data section with the actual current number. The number inputted by the applicant was   the prior application data; or  other
	Added the mandatory heading and subheadings for "Current Application Data".
	Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:
	Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
	Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
	Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
	Inserted colons after headings/subheadings. Headings edited included:
	Deleted extra, invalid, headings used by an applicant, specifically:
	Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as
П	Inserted mandatory headings, specifically:
	Corrected an obvious error in the response, specifically:
	Edited identifiers where upper case is used but lower case is required, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:
	A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
	Deleted <i>ending</i> stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:
	Other:

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:20

INPUT SET: S3019.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

1		S	EQUENCE LISTING
2 3 4	(1) Ge	neral Information:	
5 6	(i)	APPLICANT:	Andrew C. Hiatt, Floyd Rose
7 8 9 10	(ii)	TITLE OF INVENTION:	ENZYME CATALYZED TEMPLATE- INDEPENDENT CREATION OF PHOSPHODIESTER BONDS USING PROTECTED NUCLEOTIDES
11 12 13	(iii)	NUMBER OF SEQUENCES:	8
14 15	(iv)	CORRESPONDENCE ADDRESS:	
16 17 18		(A) ADDRESSEE: (B) STREET:	Lyon & Lyon 633 West Fifth Street Suite 4700
19		(C) CITY:	Los Angeles
20		(D) STATE:	California
21		(E) COUNTRY:	U.S.A.
22 23		(F) ZIP:	90071
24 25	(v)	COMPUTER READABLE FORM:	
26 27		(A) MEDIUM TYPE:	3.5" Diskette, 1.44 Mb storage
28		(B) COMPUTER:	IBM Compatible
29		(C) OPERATING SYSTEM:	
30 31		(D) SOFTWARE:	Word Perfect 5.1
32 33	(Vi)	CURRENT APPLICATION DATA	:
34		(A) APPLICATION NUMBER:	08/300,484
35		(B) FILING DATE:	September 1, 1994
36		(C) CLASSIFICATION:	-
37			
38 39	(Vii)	PRIOR APPLICATION DATA:	
40		Prior applications total	·
41		including application	
42		described below:	none
43			
44 45	(viii)	ATTORNEY/AGENT INFORMATI	ON:
46		(A) NAME:	Guise, Jeffrey W.

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:23

INPUT SET: S3019.raw

		INPUT SET: S3019
47	(B) REGISTRATION NUMBER	ER: 34,613
48	(C) REFERENCE/DOCKET I	NUMBER: 207/145
49		
50 51	(ix) TELECOMMUNICATION INFO	RMATION:
52	(A) TELEPHONE:	(619) 552-8400
53	(B) TELEFAX:	(619) 552-0159
54	(C) TELEX:	67-3510
55	(-,	
56 57	(2) INFORMATION FOR SEQ ID NO:	1:
58	(i) SEQUENCE CHARACTER	ISTICS:
59		
60	(A) LENGTH:	12
61	(B) TYPE:	nucleic acid
62	(C) STRANDEDNESS:	single
63	(D) TOPOLOGY:	linear
64		
65	(ix) FEATURE:	
66		
67	(D) OTHER INFORMAT	FION: base number 12 is m7g
68	• •	
69		
70	(xi) SEQUENCE DESCRIPTION	ON: SEQ ID NO: 1:
71		-
72	CCCCCCCC CG	12
73		
74		
75		
76	(2) INFORMATION FOR SEQ ID NO:	2:
77	-	
78	(i) SEQUENCE CHARACTER	ISTICS:
79		
80	(A) LENGTH:	19
81	/P/ TVDE.	nucleic acid
82	(C) STRANDEDNESS:	single
83	(D) TOPOLOGY:	linear
84	(-,	
85	(ii) SEQUENCE DESCRIPTION	ON: SEO ID NO: 2:
86	(,	
87	CCCCCCCC CCCCTGCA	19
88		
89		
90		
91	(2) INFORMATION FOR SEQ ID NO:	3:
92	(1) Intomatition for pag 15 not	•
93	(i) SEQUENCE CHARACTER	ISTICS:
94	(I) DECORROR CHARACTERS	n = - = - = -
95	(A) LENGTH:	20
96	(A) LENGIH: (B) TYPE:	nucleic acid
97	(C) STRANDEDNESS:	single
9 <i>1</i> 98	(C) STRANDEDNESS: (D) TOPOLOGY:	linear
	(D) TOPOLOGY:	TIMEAL
99		

151 152

(2) INFORMATION FOR SEQ ID NO:

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:26

#### INPUT SET: S3019.raw 100 (ii) SEQUENCE DESCRIPTION: SEQ ID NO: 3: 101 CTGCAGGGG GGGGGGGG 20 102 103 104 105 106 107 108 109 110 (2) INFORMATION FOR SEQ ID NO: 111 112 (i) SEQUENCE CHARACTERISTICS: 113 114 115 (A) LENGTH: (B) TYPE: 116 nucleic acid (C) STRANDEDNESS: 117 single (D) TOPOLOGY: linear 118 119 (ii) SEQUENCE DESCRIPTION: SEQ ID NO: 4: 120 121 122 ccccccc 123 124 (2) INFORMATION FOR SEQ ID NO: 125 126 (i) SEQUENCE CHARACTERISTICS: 127 128 129 (A) LENGTH: 130 (B) TYPE: nucleic acid (C) STRANDEDNESS: 131 single 132 (D) TOPOLOGY: linear 133 (ii) SEQUENCE DESCRIPTION: SEQ ID NO: 5: 134 135 136 GGGGGGGG 137 138 (2) INFORMATION FOR SEQ ID NO: 139 140 141 (i) SEQUENCE CHARACTERISTICS: 142 143 (A) LENGTH: 144 (B) TYPE: nucleic acid 145 (C) STRANDEDNESS: single 146 (D) TOPOLOGY: linear 147 (ii) SEQUENCE DESCRIPTION: SEQ ID NO: 6: 148 149 150 CTGCA 5

7:

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:28

#### INPUT SET: S3019.raw

153				
154	(i) SEQU	JENCE CHARACTERIS	TICS:	
155				
156	(A)	LENGTH:	9	
157	(B)	TYPE:	nucleic acid	
158	(C)	STRANDEDNESS:	single	
159	(D)	TOPOLOGY:	linear	
160				
161	(ii) SEQU	JENCE DESCRIPTION	: SEQ ID NO: 7	
162				
163	CTGCATGCA			9
164				
165				
166	(2) INFORMATION FO	OR SEQ ID NO:	8:	
167				
168	(i) SEQU	JENCE CHARACTERIS	TICS:	
169				
170		LENGTH:	10	
171	(B)	TYPE:	nucleic acid	
172	(C)	STRANDEDNESS:	<i>-</i>	
173	(D)	TOPOLOGY:	linear	
174				
175	(ii) SEQU	JENCE DESCRIPTION	: SEQ ID NO: 8:	<b>;</b>
176				
177	CTGCATGCAG			10
178				
179				
180				
181				
182				

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:30

INPUT SET: S3019.raw

#### \*\*\*\*\* PREVIOUSLY ERRORED SEQUENCES - EDITED \*\*\*\*\*

166	(2) INFORMATION FOR SEQ ID NO: 8:	
167		
168	(i) SEQUENCE CHARACTERISTICS:	
169		
170	(A) LENGTH: 10	
171	(B) TYPE: nucleic acid	
172	(C) STRANDEDNESS: single	
173	(D) TOPOLOGY: linear	
174		
175	(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 8:	
176		
177	CTGCATGCAG	10
178		
179		
180		
181		
182		

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 21:01:31

INPUT SET: S3019.raw

Line

Error

Original Text

45

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 15:57:21

INPUT SET: S3019.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

```
SEQUENCE LISTING
 1
 2
     (1)
            General Information:
 3
 4
 5
              APPLICANT:
                                          Andrew C. Hiatt, Floyd Rose
          (i)
 6
                                          ENZYME CATALYZED TEMPLATE-
 7
         (ii)
               TITLE OF INVENTION:
 8
                                          INDEPENDENT CREATION OF
                                          PHOSPHODIESTER BONDS USING
 9
                                          PROTECTED NUCLEOTIDES
10
11
12
        (iii) NUMBER OF SEQUENCES:
13
               CORRESPONDENCE ADDRESS:
14
         (iv)
15
                                          Lyon & Lyon
16
                (A)
                      ADDRESSEE:
                                          633 West Fifth Street
17
               (B)
                      STREET:
                                          Suite 4700
18
                                          Los Angeles
19
               (C)
                      CITY:
                                          California
                      STATE:
20
                (D)
                      COUNTRY:
                                          U.S.A.
                (E)
21
                                          90071
                      ZIP:
22
                (F)
23
               COMPUTER READABLE FORM:
24
25
26
                (A)
                      MEDIUM TYPE:
                                          3.5" Diskette, 1.44 Mb
27
                                          storage
28
               (B)
                      COMPUTER:
                                          IBM Compatible
29
                (C)
                      OPERATING SYSTEM:
                                          IBM P.C. DOS 5.0
30
               (D)
                      SOFTWARE:
                                          Word Perfect 5.1
31
32
         (vi) CURRENT APPLICATION DATA:
33
                    APPLICATION NUMBER:
                                             08/300,484
34
                (A)
                                             September 1, 1994
35
                    FILING DATE:
               (B)
                    CLASSIFICATION:
36
               (C)
37
38
        (vii) PRIOR APPLICATION DATA:
39
40
               Prior applications total,
               including application
41
               described below:
42
                                                none
43
44
       (viii) ATTORNEY/AGENT INFORMATION:
```

RAW SEQUENCE LISTING PAGE: 2 DATE: 03/30/95 PATENT APPLICATION US/08/300,484 TIME: 15:57:26 INPUT SET: S3019.raw 46 (A) NAME: Guise, Jeffrey W. 47 (B) REGISTRATION NUMBER: 34,613 (C) 207/145 48 REFERENCE/DOCKET NUMBER: 49 (ix) TELECOMMUNICATION INFORMATION: 50 51 52 (A) TELEPHONE: (619) 552-8400 53 (B) TELEFAX: (619) 552-0159 54 (C) TELEX: 67-3510(2) INFORMATION FOR SEQ ID NO: 55 56 (i) SEQUENCE CHARACTERISTICS: 57 58 LENGTH: (A) 59 (B) TYPE: nucleic acid 60 (C) **STRANDEDNESS:** single linear 61 (D) TOPOLOGY: 62 63 (ix) Features: 64 (D) 65 Other Information: base number 12 is m7g 66 67 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1: 68 69 70 cccccccc cg 12 71 72 73 **ERRORED SEQUENCES FOLLOW:** 

			(
	164	(2) INFORMATION FOR SEQ ID NO:	3:
	165		`
	166	(i) SEQUENCE CHARACTERIS	rics:
	167		
	168	(A) LENGTH:	10
	169	(B) TYPE:	nucleic acid //
	170	(C) STRANDEDNESS:	single
	171	(D) TOPOLOGY:	linear
	172	, ,	
>	173	(ii) SEQUENCE DESCRIPTION	: SEQ ID NO: 10
	174		
	175	CTGCATGCAG	10
	176		
	177		
	178		
	179		

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/300,484

DATE: 03/30/95 TIME: 15:57:29

#### INPUT SET: S3019.raw

Unknown or Misplaced Identifier  (xi) S	NUMBER OF SEQUENCES: 8 SEQUENCE CHARACTERISTICS: LENGTH: 12 TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear Features: Other Information: base number 12 is m7g SEQUENCE DESCRIPTION: SEQ ID NO: 1: SEQUENCE DESCRIPTION: SEQ ID NO: 10: